

hæmoglobin of animals, acting like it as an ozone-transferrer. It cannot, however, yet be regarded as more than fair presumption that this substance is that with which oxygen becomes loosely combined.

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ART. IX.—*Note of the Great Meteor of June 8th, 1878.*

BY R. L. J. ELLERY, F.R.S.

[Read 11th July, 1878.]

THERE is one point in connection with the apparition of the great daylight meteor of June 8, 1878, which is remarkable and interesting—that is the apparent exactness with which different observers, hundreds of miles apart, erroneously localise certain phases of the phenomenon, and the imaginary *nearness* to the observers at which these phases occurred, leading one to the conclusion that usual human experience in judging of distance, &c., is altogether at a loss in the case of such phenomena as this. The meteor appeared about 3 p.m. on June 8, and was seen at Sydney, off the N.S.W. coast at sea, at Yass, Braidwood, Cooma, Omeo, over many parts of Gippsland, at Geelong, Ballarat, Seymour, &c., &c., and by sifting all the reports, and allowing for difference of local time, *all about the same time*. There can be no doubt it reached its minimum distance from the earth somewhere in the zenith of Kosciusko, and passed nearly over the zeniths of Cooma and Omeo. From Seymour it was seen in the east, about 30° high; from this its height may be roughly estimated as over 100 miles, while by two different observers at different places a bursting-up of the meteor was witnessed, followed at an estimated interval of from 10 to 15 minutes by loud explosions—most probably one explosion and its aerial echoes. This would give us an estimate of its distance from these observers of nearly 200 miles.

At Cooma, Yass, and about that district, it was firmly believed to have come to the earth in the neighbourhood, and to have fell by the side of Jellimatong; indeed, it was reported that fragments were picked up in that district. The explosion seemed to be quite close to the observers, and was called by some an earthquake.

Now from Mr. Christian Ogilvie, at Omeo, I received a very interesting account of the meteor as seen in the Omeo district by numerous observers, and here also the explosion was localised at the mountain called the "Brothers." Two observers, five miles from the mountain, in different directions, describe it "*as if the mountain had burst,*" and "*like the crash of an enormous falling rock, followed by thunder.*"

It is not probable, I think, that there could have been two explosions of this meteor, but that whoever witnessed the apparition and heard the explosion, estimated it to have taken place in his immediate vicinity, although there can be little doubt that the meteor was at no time during its appearance within 80 or probably 100 miles of the earth. Observers at Seymour describe having seen the meteor burst, though no sound, of course, reached that district.

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ART. X.—*The Perception of Colour.*

BY JAMES JAMIESON, M.D.

[Read 17th October, 1878.]

A FEW months ago, in a short communication to this Society ("Photographs on the Retina," 11th April, 1878), I endeavoured to give an account of what was then known of the properties of the colouring matter called retina-purple. More extended observations have tended to establish further the importance of photo-chemical processes in the act of vision. That the retina contains colouring matter, capable of undergoing rapid changes under the action of light, and that pictures of objects can be printed on the retina by help of it (optograms of Kühne), would alone be sufficient to suggest its functional importance. The well-known persistence of visual impressions, *i.e.*, the fact that after looking at an object, especially a bright one, we can still see it if the eye is immediately closed, the outlines gradually becoming less distinct till the picture fades away, is best explained by the alternate destruction and restitution of the retina-purple by light and in the dark. Boll has found the colour of the human retina deeper and